

media fact sheet

GLOSSARY: CANCER-RELATED BREAKTHROUGH PAIN

Types of Pain

Acute pain

Acute pain is associated with an injury or event such as surgery; this pain is anticipated and serves to alert or protect the body.

Chronic pain

Chronic pain lasts beyond the anticipated healing time (usually more than three months). Often, there are two components of chronic pain: persistent pain and breakthrough pain. Chronic pain that is moderate-to-severe in intensity is commonly treated with opioid medication.

Persistent pain

Persistent pain is continuous and lasts 12 or more hours a day; it may also be referred to as baseline pain. Moderate-to-severe persistent pain is commonly treated with an opioid medication taken around-the-clock.

Breakthrough pain in cancer

Breakthrough pain (BTP) is moderate-to-severe flare of pain that rises above otherwise well-managed persistent pain. Breakthrough pain is commonly characterized by its rapid onset and relatively short duration. A typically Breakthrough pain episode in patients with cancer may peak in as little as three minutes and last 30 minutes; episodes can occur up to several times per day. (These numbers are based on medians, the midpoint of the range of data observed in studies.) Breakthrough pain is often treated with opioids that are taken as needed at the start or anticipation of an episode.

Types of Breakthrough Pain in Patients with Cancer

Incident pain

Incident pain is a type of breakthrough pain that is caused by a specific "event," such as waking or coughing.

Spontaneous pain

Spontaneous pain is a type of breakthrough pain that is unpredictable; it occurs without a readily identifiable cause.

End-of-dose failure

End-of-dose failure is a type of breakthrough pain that may occur before a scheduled dose of an around-the-clock analgesic used to treat persistent pain.

Opioid Medications

Opioids

Opioids are federal controlled substances that are strong pain medications commonly prescribed to manage moderate-to-severe acute or chronic pain. The term is used to describe both natural and synthetic compounds in this class of medications. Opioids mainly act by attaching to specific receptors in the central nervous system to interfere with and stop pain messages from being sent to and from the brain. While opioids minimize the pain sensation, they do not take away its cause. Examples of opioid medications include morphine, fentanyl, oxycodone, and codeine. Opioids may be distinguished by their duration of effect (how long the pain relief lasts) and/or onset of action (how fast it takes to have an effect). Different types of opioids may be required to treat different types of pain based on the characteristics of the condition.

Opiates

Opiates are a kind of natural opioid that are chemically similar to morphine.

Long-acting opioids (LAOs)

Long-acting opioids are medications used to treat moderate-to-severe persistent pain. Typically, these medications are taken around-the-clock.

Short-acting opioids (SAOs)

Short-acting opioids are medications used to treat moderate-to-severe acute or chronic pain. Conventional SAOs require initial metabolism in the gastrointestinal tract and have an onset of up to 30-45 minutes.

Rapid-onset opioids (ROOs)

Rapid-onset opioids are a type of short-acting opioid. Rapid-onset opioids are medications used to treat breakthrough pain in appropriate opioid-tolerant patients with cancer. These medications have an onset of analgesia in some patients as early as 15 minutes.

Opioid Tolerance

Opioid tolerance in the context of rapid onset opioids refers to taking more than 60 mg of morphine equivalents on a daily basis for at least a week to treat persistent pain. It is believed that taking this level of opioid around the clock reduces the risk of serious adverse events such as respiratory depression. It is important to know that opioid tolerance here does not refer to analgesic tolerance which is a need to increase the dose of a drug to obtain the same amount of pain relief. In addition, patients often confuse opioid tolerance with lack of tolerability such as nausea and vomiting.

Other Important Terms

Abuse

Abuse is intentional, inappropriate use of a medication that is accompanied by harmful physical or psychological effects.

Addiction

Addiction is a primary, chronic, neurobiologic disease that is influenced by genetic, psychosocial, and environmental factors. It is characterized by one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving.

Diversion

Diversion is illegal use, possession, or transfer of a prescription medication from a legitimate source (e.g., a patient with a prescription, a pharmacy, a physician's office) to another individual and/or for illegal sale.

Misuse

Misuse implies that an individual intentionally disregards the instructions accompanying a prescribed medication, such as taking it for other than the intended use, taking more or less than the prescribed amount, or taking it too frequently or for too long. Misuse may also include recreational use that does not meet the definition of abuse.

Physical dependence

Physical dependence is an expected state of adaptation typical of a particular class of medication. It can result in withdrawal syndromes if there are abrupt decreases in the patient's medications. Physical dependence is different from addiction.

Pseudoaddiction

Pseudoaddiction is a drug-seeking behavior, similar to that seen in addiction, but instead caused by under-treated pain.

Tolerance

Tolerance is a state of adaptation in which exposure to a medication results in changes that decrease one or more of the medication's effects over time. Being tolerant to a medication is not addiction.

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